



**US Army Corps
of Engineers** ®
Kansas City District

News Release

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For immediate release

New Groundwater Treatment System at former Nebraska Ordnance Plant

The Kansas City District Army Corps of Engineers cordially invites the media April 22nd from 1:00 to 1:30 p.m. to discuss the recent construction completion of our latest groundwater treatment plant. USACE will host a 30-minute media opportunity to share the recent success designed to significantly reduce the time needed to clean up the site.

As part of the groundwater remediation system at the former Nebraska Ordnance Plant, a new treatment plant has been installed near the existing Advanced Oxidation Process Plant. The new Load Line 4 Treatment Plant is designed to treat localized high concentrations of contaminated groundwater from Focused Extraction Well 15.

The new Load Line 4 Treatment Plant consists of an air stripper to address trichloroethylene (TCE) contamination in the groundwater and, also contains a granular activated carbon filter to treat the air prior to release from the system. The air stripper, similar to the unit used at the Load Line 1 Treatment Plant, employs a technology to force air through extracted groundwater causing the TCE to move from the water phase to the air phase. The vapor phase granular activated carbon filter on the air stripper unit then extracts the TCE from the air phase. At the end of its useful life, the granular activated carbon is appropriately destroyed or recycled.

The treatment plant has a flow rate of up to 500 gallons per minute and can treat groundwater contaminated with TCE concentrations of up to 3000 (ppb). The groundwater will be treated to an effluent concentration of less than five ppb TCE prior to discharge, in accordance with Nebraska Department of Environmental Quality requirements. The treated groundwater is discharged either directly to Wahoo Creek or, will be directed to the Main Treatment Plant if the initial treatment at Load Line 4 Treatment Plant does not reduce the TCE level to 5 ppb or below.

All operations within Load Line 4 treatment system are controlled remotely through the Supervisory Control and Data Acquisition system. The SCADA system includes a remote telemetry unit (consisting of a modem and radio antenna) that communicates with both, the Main Treatment Plant and the Focused Extraction Well 15. In addition, the groundwater extraction and treatment rates are controlled by pumps that have variable frequency drive motors to ensure the system remains energy efficient. Most importantly, the SCADA system employs various system checks and alarms to ensure proper functioning of the Load Line 4 Treatment Plant.

Please contact Kristine Stein at (816) 389-3172 or kristine.m.stein@usace.army.mil for additional information regarding this event.